REMARKS/ARGUMENTS

Claims 8-24 are active. Claim 8 has been amended to exclude extracts produced by fermentation. The examples in the specification inherently disclose extract produced without fermention. Extracts of the microalgae *Chlorella*, which is disclosed on page 4, line 1 of the specification, have also been excluded from Claim 8. Accordingly, the Applicants do not believe that any new matter has been added.

Rejection—35 U.S.C. §102

Claims 8-24 were rejected under 35 U.S.C. 102(b) as being anticipated by Naoki et al., JP 61-087614. This rejection does not apply to Claim 8 which has been amended to exclude the fermented extracts of Naoki.

Furthermore, the Applicants traverse this rejection since Naoki does not disclose a product made by aqueous extraction and proteolysis of algae as required by independent Claim 8. Rather, Naoki is directed to a process where algae are decomposed with a cellulose decomposition enzyme (e.g., mercerase, hemicellulase, etc.), mixed with other nutritional ingredients and subsequently fermented with a yeast or lactobacillus.

The Official Action has assumed that the Naoki product is identical to that covered by Claim 8, but does not provide any rationale for asserting identity between the products, see MPEP 2114 which requires that the Examiner "provide a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art". The Naoki product is treated with a cellulose decomposition enzyme, but the product of Claim 8 is treated with a different type of enzyme a protease. One with skill in the art understand that treatment with these distinct types of enzymes would produce different products, since one would produce an extract with degraded cellulose and the other with digested proteins. The Office has not yet provided a rationale explaining why treatment of algae with different types of enzymes

would produce identical products. *A fortiori* (for an even stronger reason), Naoki does not disclose or suggest the extracts produced by the steps required by Claim 20.

Moreover, Claims 21-22 are directed to extracts produced using specific proteases which are not disclosed by Naoki, and Naoki does not disclose other limitations in the dependent claims, such as the water-soluble algae extract content of Claims 23-24 or certain types of algae described by Claims 11-19. Accordingly, in view of the amendment of Claim 8 and in view of the remarks above, the Applicants respectfully request that this rejection be withdrawn.

Rejection—35 U.S.C. §102

Claims 8-24 were rejected under 35 U.S.C. 102(b) as being anticipated by Albitskaya et al., RU 2,044,770. This rejection is moot in view of the exclusion of *Chlorella* from the scope of Claim 8. Albitskaya is directed to a *Chlorella* extract.

Moreover, the Applicants respectfully traverse this rejection since Albitskaya does not disclose a process involving aqueous extraction and proteolysis of algae and recovery of a water-soluble fraction, which is required by independent Claim 8.

Albitskaya (abstract) does not describe the extraction steps of their method sequentially. However, this document appears to be directed to a process where *Chlorella* microalgae biomass (CMAB) is treated with an organic solvent to separate the lipid-pigment complex, and then subjected to enzyme hydrolysis. The enzyme hydrolysis comprises heating and hydrolysis by cellulolytic and proteolytic enzymes. Hydrolysis is continued until the dry substance content of the biomass aqueous phase attains 5-5.8%. The abstract does not describe what constitutes the dry substance content, but this would appear to refer to insoluble unhydrolysed biomass residue. Hydrolysis is followed by separation of an aqueous phase containing the protein hydrolysate and the unhydrolysed biomass residue. The abstract

does not explicitly state that the unhydrolysed biomass is insoluble, but one would infer that it is, since it has not dissolved in the aqueous or organic phases of the extraction mixture. Thus, the Albitskaya extract contains insoluble unhydrolyzed biomass and would lack components which were extracted into the organic phase, including hydrophobic or amphiphilic peptides and proteins.

On the other hand, the present claims require aqueous extraction and proteolysis of algae and recovery of a water-soluble fraction and does not require extraction using an organic solvent. Accordingly, the Applicants respectfully submit that this rejection would not apply to the present claims.

Rejection—35 U.S.C. §103

Claims 8-24 were rejected under 35 U.S.C. 103(a) as being anticipated by Naoki et al., JP 61-087614. Naoki has been addressed above and does not disclose or suggest proteolysis of algae, nor disclose or suggest the addition of unfermented algae extracts to cosmetics. Accordingly, this rejection would not apply to the present claims.

Rejection—Double Patenting

Claims 8-24 were rejected on the grounds of nonstatutory obviousness-type double patenting over Claims 1, 14, 15 and 20 of Suetsuna et al., U.S. Patent No. 6,217,879. The Applicants traverse this rejection since the pending claims require a composition comprising a cosmetic base and that the composition have certain functional properties making it useful as a cosmetic. On the other hand, the claims of the prior patent do not require these limitations and refer to products such as foods and antihypertensive agents (col. 13, lines 3-22). Moreover, the claims of the prior patent do not require the particular cosmetic

ingredients required by Claims 9-12 and only cover laver and not the other types of algae required by certain dependent claims.

Provisional Rejection—Double Patenting

Claims 8-24 were provisionally rejected on the grounds of nonstatutory obviousness-type double patenting over Claims 1-8 and 12 of copending U.S. Application No. 11/078,617. The Applicants respectfully request that this provisional double patenting rejection be held in abeyance pending the identification of otherwise allowable subject matter in the present application. Upon an indication of allowability for the pending claims, the Applicants understand that the provisional double patenting rejection will be withdrawn, provided the claims in the copending application have not been allowed, MPEP 804(I)(B).

Provisional Rejection—Double Patenting

Claims 8-24 were provisionally rejected on the grounds of nonstatutory obviousness-type double patenting over 1-8 and 12 of copending U.S. Application No. 10/652,069. The Applicants respectfully request that this provisional double patenting rejection be held in abeyance pending the identification of otherwise allowable subject matter in the present application. Upon an indication of allowability for the pending claims, the Applicants understand that the provisional double patenting rejection will be withdrawn, provided the claims in the copending application have not been allowed, MPEP 804(I)(B).

CONCLUSION

In view of the above amendments and remarks, the Applicant respectfully submit that this application is now in condition for allowance. An early notification of such allowance is earnestly requested.

Respectfully submitted,

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